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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/727,950

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Ramnath N. Iyer

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05/12/2008

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EXAMINER

LANG, AMY T

ART UNIT

PAPER NUMBER

3731

MAIL DATE

DELIVERY MODE

05/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/727,950	Applicant(s) IYER ET AL.	
	Examiner AMY T. LANG	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-11,13-19,23 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-7, 9-11, 13-19, 23, and 25-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. **Claims 1, 3-7, 9-11, 13-19, 23, 26, and 28** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 11, 19, and 26, and 28 all recite a low pulley coefficient of friction ranging "from about 0.0758 to about 0.085 or greater." Therefore it is the examiner's position that the instant claims recite a range of 0.0758 to 0.085 or 0.0758 to the maximum coefficient of friction possible. However, the instant specification only recites a coefficient of friction from 0.085 or greater (page 2, lines 12-15) or 0.0758 when thiadiazole is used at 0.095 wt% (Table 1). Furthermore, the instant claims and specification teach away from using thiadiazole in as low amount as 0.095 wt% (page 7, lines 9). Therefore, it is the examiner's position that the instant specification does not support the lower end value, 0.0758, in either claimed range. The instant specification only supports the range of 0.085 or greater. Claims 3-7, 9, 10, 13-18, 23, 25, and 27 are dependent on claims 1, 11, 19, and 26 and therefore are also rendered indefinite.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 3-7, 9-11, 13-19, 23, and 25-28** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ward (US 6,251,840 B1).

With regard to **claims 1, 3-5, 7, 9-11, 13-14, 16-19, 23, and 25-28** Ward discloses a lubricating composition for use as a transmission fluid, including a continuously variable transmission, which inherently encompasses steel-on-steel contact (column 1, lines 12-17). One specific useful base oil is disclosed as mineral oil in an amount greater than 80 wt% (column 2, lines 30-33, 47-52). The composition further includes 2-hydrocarbyldithio-5-mercapto-1,3,4-thiadiazole, 2,5-bis-(hydrocarbyldithio)-1,3,4-thiadiazole, products from combining an oil soluble dispersant with 2,5-dimercapto-1,3,4-thiadiazole, and mixtures thereof (column 4, lines 38-62).

Ward does not disclose (i) the coefficient of friction of the lubricating composition or (ii) the composition as having improved steel-on-steel properties.

With respect to (i) above, the disclosed thiadiazoles are present in the lubricating composition from 0.025 to 5 wt% (column 4, lines 38-39). Since the instant specification provides evidence that this amount is sufficient to provide a coefficient of friction of at least 0.0758, Ward clearly overlaps the instant claims (see Table 1 of Spec). If Ward

does not anticipate the instant claims, it is the examiner's position that the range disclosed by Ward renders obvious a wt% of 0.095 or 0.30 of the thiadiazole compounds. Therefore, Ward clearly overlaps the instant coefficient of friction when the thiadiazoles are utilized in either amount.

With respect to (ii) above, since Ward discloses the same lubricating composition as is instantly claimed, the disclosed composition would intrinsically display the same steel-on-steel friction properties.

With regard to **claims 6 and 15**, the transmission is only functionally recited. It is irrelevant as to the type of transmission the lubricating composition is intended to be used with.

Response to Arguments

5. Applicant's arguments and amendments, filed 01/28/2008 with respect to the 35 USC 112 rejection of claim 3 and the 35 USC 112 rejection of claims 26 and 28 have been fully considered and are persuasive. The rejections have been withdrawn.

6. Applicant's arguments filed 01/28/2008 with respect to Ward have been fully considered but they are not persuasive. Applicant argues that the broad wt% range of Ward does not anticipate the instant claims. However, a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d

804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989). Although the range of Ward is broader than the instant claims, Ward still overlaps the instant claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy Lang whose telephone number is (571) 272-9057. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on 571-272-4713. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

05/01/2008
/Amy T Lang/
Examiner, Art Unit 3731

/Todd E Manahan/
Supervisory Patent Examiner, Art Unit 3731